

ABSTRACT

In a known wavelength multiplexer, optical signals to pass are passed with their wavelengths held identical. Therefore, unless an unused wavelength common to all zones exists in case of setting an 5 optical channel, the channel cannot be set. According to the present invention, a drop/add type wavelength multiplexer includes a wavelength converting section (50 in Fig. 5) which converts the wavelengths of optical signals to pass from the input side of the multiplexer to the output side thereof. In a network employing the 10 wavelength multiplexers at individual nodes, a new optical channel can be easily set by utilizing wavelengths not used at the nodes.